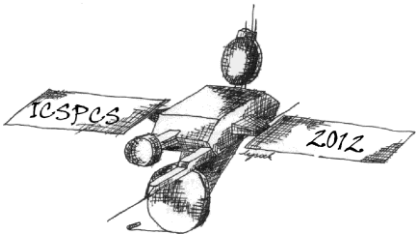
Call for Papers

6th International Conference on Signal Processing and Communication Systems, ICSPCS'2012



Gold Coast, Australia 12-14 December 2012

http://www.dspcs-witsp.com/icspcs_2012/index.html

Communication Systems worldwide have provided a rapidly growing and useful range of services and are continuing to evolve using a multitude of Signal Processing techniques. The 6th International Conference on Signal Processing and Communication Systems, ICSPCS'2012, follows the very successful ICSPCS'2010 and ICSPCS'2011. A major objective of the Conference will be to pursue the progression from communication and information theory through to the implementation, evaluation and performance improvement of practical communication systems using Signal Processing technology. The Conference is also planned to be a forum for presenting research into topics ranging from those of the physical layer to the application layer. All aspects of the protocols and processes required for the future networks to operate better and the applications to utilize the full potential offered by the current and the emerging networking infrastructure are also encompassed. In addition, we expect that, as during the previous events, there will be several papers dealing with image, video and audio processing for multimedia, medical and forensic applications, as well as with the security of private and corporate data.

The Conference is technically co-sponsored by IEEE Communications Society. All presented papers will be published in the IEEE Xplore.

Previously unpublished contributions to the following technical areas, but not limited to, are solicited:

Networking
- Traffic modelling
- Protocols
- Embedded Internet devices
- New and enhanced services
- Resource and information management
- Adaptive QoS provisioning
- End-to-end QoS
- Emerging technologies

Wireless Networks
- Mobile ad hoc networking
- Personal area networking
- Cognitive radio and spectrum sensing
- Broadband Wireless Access
- Cross Layer Design
- Mesh Networks
- Cooperative and Intermittent Networks
- Sensor Networks
- Nano-networks
- Military Communications
- Test-beds and new applications

Information Security
- Security primitives and algorithms
- Security of wireless and distribution networks
- Security of sensor networks
- Authentication and authorization
- Encryption
- Data integrity
- Information assurance

Unconventional applications of Signal Processing
- Medical applications
- Financial modelling
- Data mining
- Forensic applications
- Traffic modelling
- Bio-signalling
- Molecular communications
- Inter and intra-cellular communications

Fixed networks
- Optical networks and switching
- Network architectures and equipment
- Programmable networks
- Pear-to-pear networking
- Test-beds and trials
- Network gaming
- New and enhanced services

Communication theory and techniques
- Channel measurements and modelling
- Coding and modulation techniques
- MIMO - theory and trials
- Spread Spectrum and CDMA systems
- OFDM technology
- Space-time coding
- Diversity techniques
- Ultra Wide-Band Communications
- Antennas and propagation

Multimedia signal processing
- Streamed multimedia applications
- Algorithms and implementations
- Image audio and video processing
- Error concealment techniques
- Management of multimedia services
- Test-beds and trials
- Multimedia games

DSP algorithms and hardware implementations
- DSP implementation in hardware
- DSP algorithms
- Smart antennas and tracking
- Signal separation

Ranging and Localization
- Indoor Positioning Technologies and Techniques
- Radio-based Positioning Systems
- Ranging and Localization Algorithms
- Vehicle/Robot Navigation
- Hybrid Positioning and Communication
- RFID Localization/Communication
- UWB Ranging and Localization

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Important Dates:

- **Full Paper Submission Deadline: 30 June 2012**
- **Notification of acceptance: 15 September 2012**
- **Camera-Ready Copy: 15 October 2012**
- **Registration: 15 October 2012**

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Each manuscript of up to 10 double column pages of A4 or Letter size (single space, font size 10 points minimum) will be peer-reviewed by at least two independent reviewers and the authors will be notified about the acceptance via email.

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Papers should be prepared according to IEEE standard template that are available for both Word and Latex at:

http://www.ieee.org/conferences_events/conferences/publishing/templates.html

Poster Session 2: Signal Processing

Exploring the Implementation of JPEG Compression on FPGA

Ann De Silva (Massey University, New Zealand); Donald G. Bailey (Massey University, New Zealand); Amal Punchihewa (Massey University & Senior Lecturer, New Zealand)

A Block Based Temporal Spatial Nonlocal Mean Algorithm For Video Denoising With Multiple Resolution

Wenjie Yin (Shanghai University, P.R. China); Haiwu Zhao (Shanghai University, P.R. China)

Robust encoded spread spectrum image watermarking in contourlet domain

Francisco García-Ugalde (National Autonomous University of Mexico, Mexico); Bohumil Psenicka (National Autonomous University of Mexico, Mexico)

Generalized Integer Transform Based Audio Reversible Watermarking Algorithm

Chi-Man Pun (University of Macau, Macao)

Information separation of Speech Signal Based on Non-negative Matrix Factorization

Ya Wang (China National Satellite Meteorological Center, P.R. China)

Time Optimization of Forward Problem in Electrical Impedance Tomography Using a DSP processor

Aidin Tahaei (Sharif University of Technology, International Campus, Kish Island, IRAN, Iran); Bijan Vosoughi Vahdat (Sharif University of Technology & Bisipl Laboratory : Biological Signal Processing Lab, Iran); Seyed Ghorshi (Sharif University of Technology, Iran)

Subband adaptive filter algorithm based on normalized least mean fourth criterion

Jae Jin Jeong (POSTECH, Korea)

Vector Equalization based on Continuous-Time Recurrent Neural Networks

Mohamad Mostafa (University of Ulm, Germany); Werner G. Teich (Ulm University, Germany); Juergen Lindner (Uni Ulm, Germany)

Sparse Signal Recovery on the Sphere: Optimizing the Sensing Matrix through Sampling

Yibeltal Fantahun Alem (The Australian National University, Australia); Daniel H. Chae (The Australian National University, Australia); Rodney Andrew Kennedy (The Australian National University, Australia)

Phase-Based Salient Object Detection

Jia Wan (the Hong Kong Polytechnic University, Hong Kong); Lam Kenneth Kin-Man (The Hong Kong Polytechnic University, Hong Kong)

Visual Quality Improvement of Digital Video by Stabilization using Adaptive CMAC Filtering

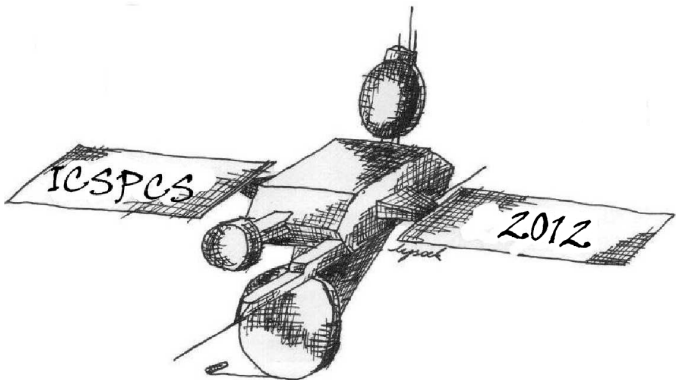
Amir Zahoor (Blekinge Institute of Technology, Karlskrona, Sweden); Wittaya Koodtalang (Blekinge Institute of Technology, Karlskrona, Sweden); Muhammad Shahid (Blekinge Institute of Technology, Karlskrona, Sweden)

On the Probability Density Function of the Product of Rayleigh Distributed Random Variables

Anushka Widanagamage (Queensland University of Technology, Australia); Anagiyaddage D. S. Jayalath (Queensland University of Technology, Australia)

Color Plus Depth 3-D Video Transmission with Hierarchical 16-QAM

Khalid Alajel (University of Southern Queensland, Australia); Wei Xiang (University of Southern Queenslan, Australia); Ibrahim Sileh (USQ, Australia)



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